VU University Amsterdam

University Centre IT

User Manual
Wireless VU- Campusnet and Eduroam Mac OS X 10.6.x

July 2011 version 2.0

VU University *Amsterdam*

This document describes how to make a wireless connection between a notebook with Macintosh OSX 10.6 (Snow Leopard) and the VU-Campusnet or the eduroam wireless network of the VU University Amsterdam.

VU-Campusnet
The VU-Campusnet is intended for use by all students and employees of the VU University Amsterdam and can be used by all persons in possession of a VU-net-id username and password combination. The network is available on the campus area. Devices that only support WPA/TKIP and not the newer WPA2/AES should use this network as eduroam only supports WPA2/AES.

eduroam
The eduroam network is a network available at numerous educational institutes around Europe and other parts of the world. Persons with a VU-net-id will be able to use the eduroam network of other institutes, connected to the eduroam network, and guests from other institutes are able to use the eduroam network at the VU University Amsterdam. More information about eduroam can be found on this website: **http://www.eduroam.org**

1. Requirements

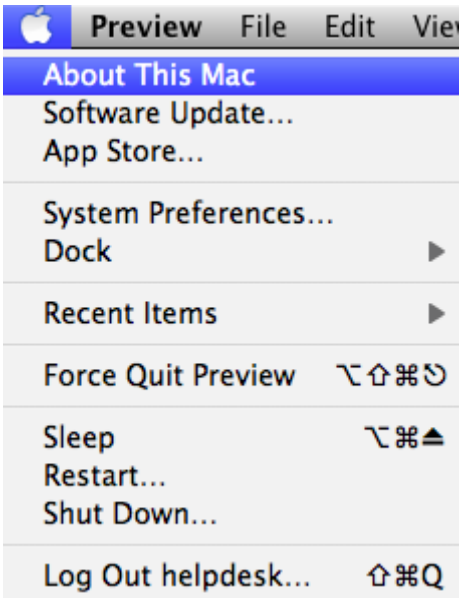
The following requirements should be met in order to establishing a wireless connection with the VU-Campusnet or eduroam network:

- A wireless network card with support for IEEE 802.11b/g and support of WPA2 / AES.
  (WPA / TKIP may also be used, but only in combination with the VU-Campusnet network)
- Macintosh OSX 10.6 (Snow Leopard).
- OSX Administrator Account.
  (With permission to change the OSX configuration)
- Your personal VU-net-id.
- Be in range of the VU wireless network.

2. Update your Mac

Before you start, it is important to update OS X to the latest version. Some versions of OS X are known to give you a hard time when connecting to the VU wireless networks.

- In the *Finder* menu bar go to the and select *About This Mac…*

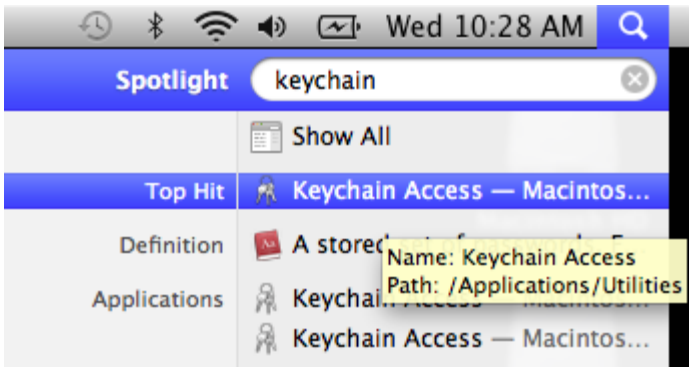


- Look at the Version number and compare this to what wikipedia states after **current version** on the Mac OS X Leopard wiki page: http://en.wikipedia.org/wiki/Mac_OS_X_Snow_Leopard
  If you run an older version of Mac OS X, update your mac first by clicking on **Software Update**… and then follow the on-screen instructions. Obviously, you will need an active Internet connection to download any updates.

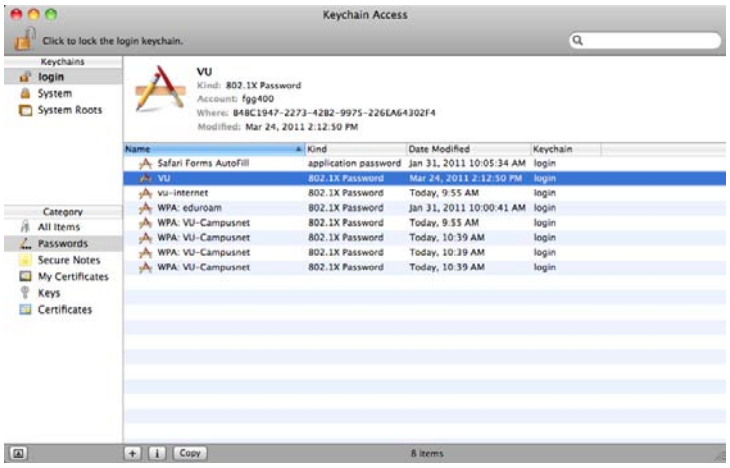
3. Remove old settings

In this step, we will remove all old settings related to the VU-Campusnet or eduroam networks. If you have never been connected (or you have never tried to connect) to one of those networks, you can skip this step. If you're experiencing problems, however, it is important to remove old settings before continuing.

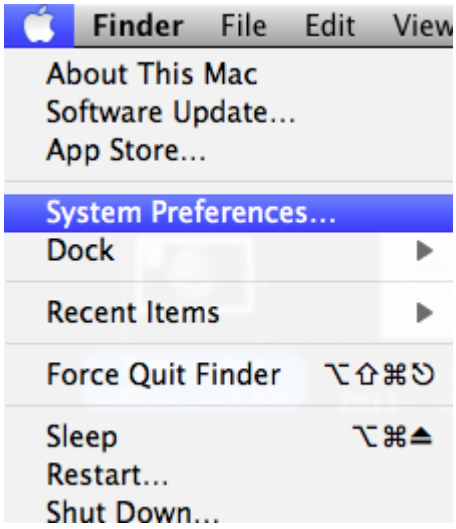
- Open spotlight by clicking on the magnifiying glass or hitting the cmd-space shortcut and search for **keychain**.



- In keychain, open the **login** keychain and select the **Passwords** category. Remove all VU and eduroam related password settings by selecting them and then hitting the backspace button.

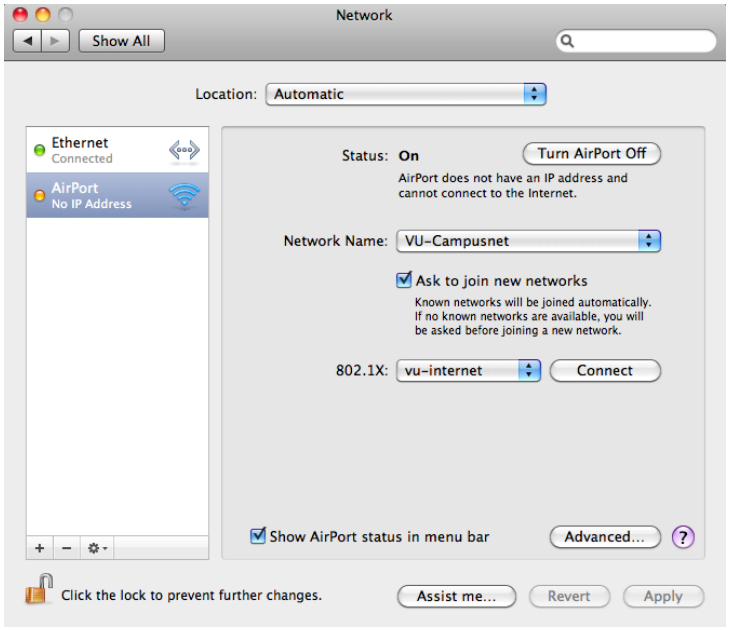


- In the *Finder* menu bar go to the and select *System Preferences…*



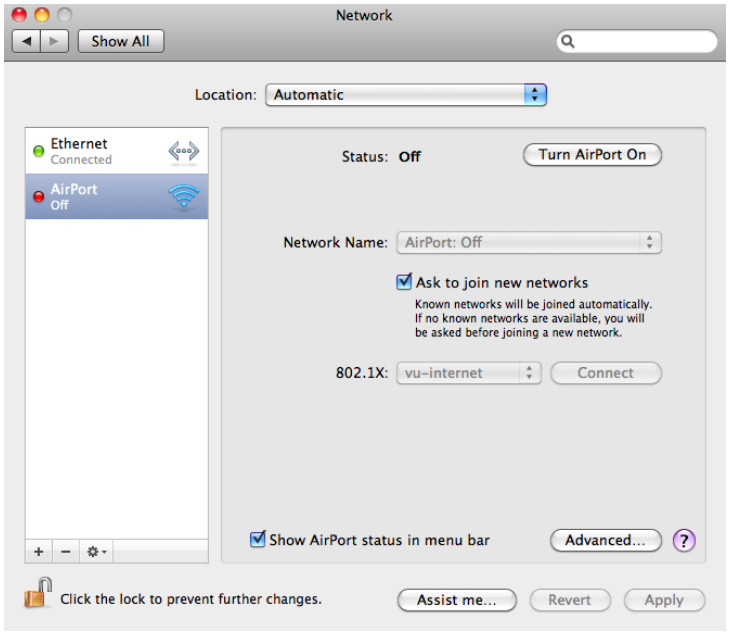
- Click on **Network** to open the network settings.

- Select *AirPort* in the left column and click on **Turn AirPort Off**.

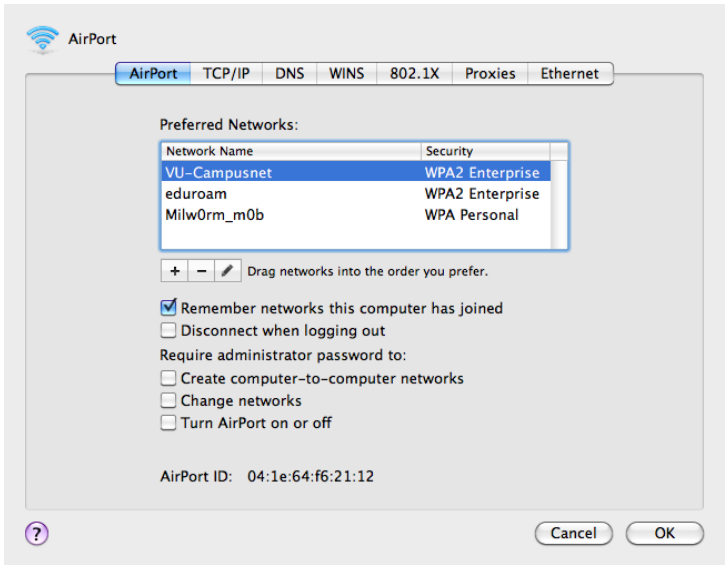


- Make sure the control panel is unlocked, If not click on the lock in the lower left corner to unlock it.
  When asked, enter the username and password of your account with administrator rights and click on **OK**.

- Click on **Advanced**…

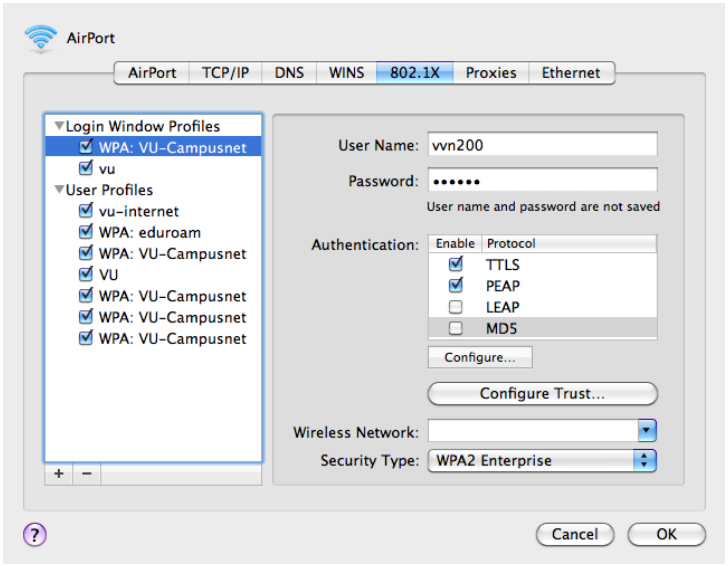


- In the *Airport* tab, remove all VU-related networks including *VU-Campusnet*, *eduroam* and *guest*. Be sure that any duplicates are removed as well.
  To remove a preferred network, select the network and click the – button.



- In the *802.1X* tab, remove all VU-related profiles. Most of them will be filed under *User profiles*, but they could be under *Login Windows Profiles* as well.
  To remove a profile, select it, followed by clicking the – button.

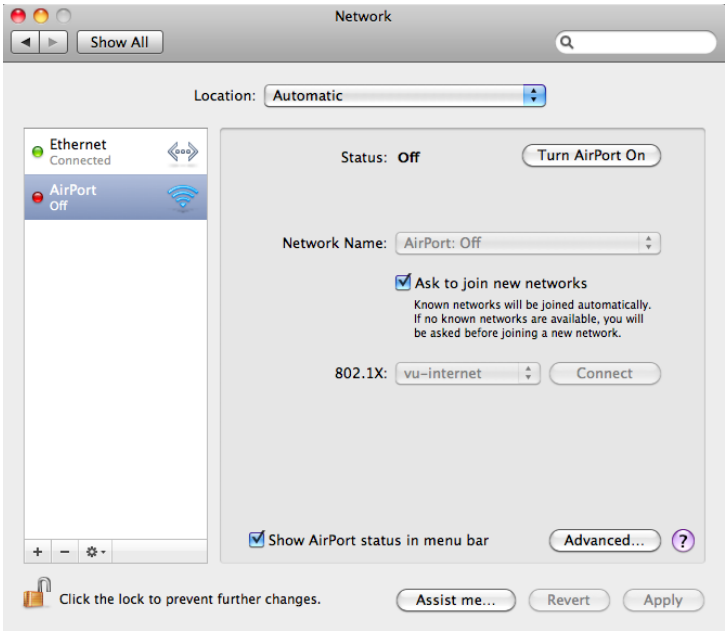
- Click **OK** to leave the Advanced window and then hit the **Apply** button to force your changes to be applied.



4. Configuration

We are now ready to set up both the VU-Campusnet and eduroam networks

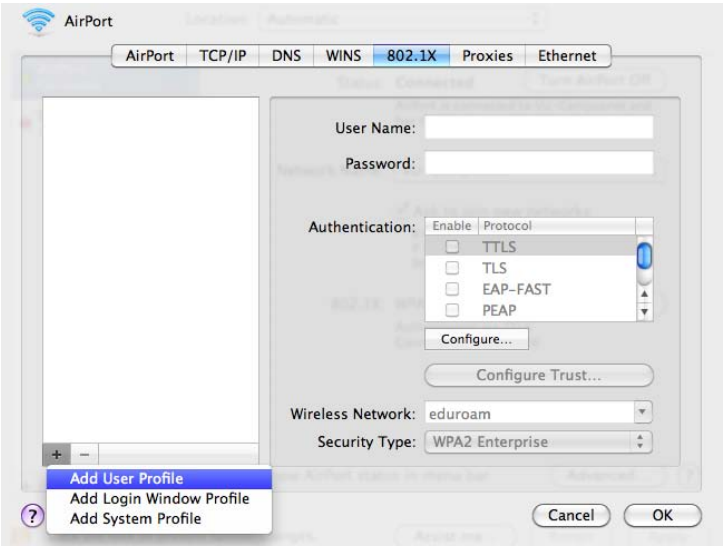
- Make sure that Airport is still turned off. Then click on **Advanced**… to open the advanced settings window.



- Go to the *802.1X* tab and press the + button and select *Add User Profile* from the dropdown menu.
  Enter *WPA: VU-Campusnet* as the profile name.

- Repeat this action to add another profile called *WPA: eduroam*

Note that there is a whitespace between *WPA:* and *VU-Campusnet/eduroam*.

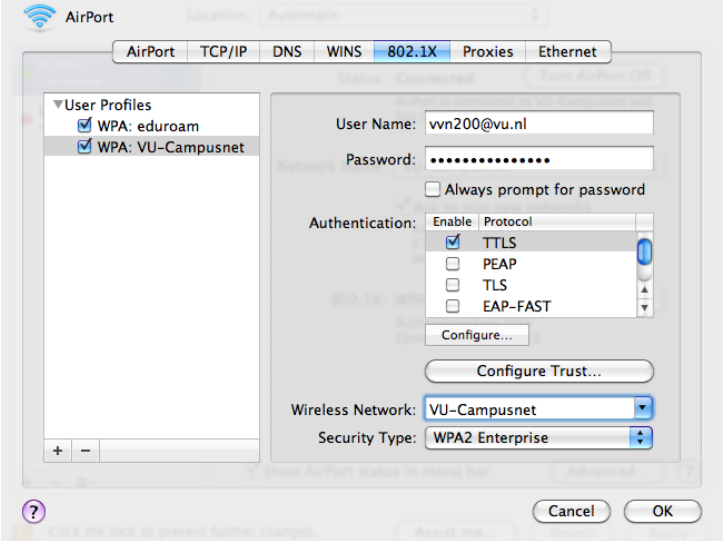


- Select *WPA: VU-Campusnet* from the list on the left under *User Profiles*.
- Enter the following information:
  Username: **<VU- net- id>@vu.nl**
  Password: **<VU- net- id Password>**
  Wireless Network: **VU- Campusnet**
  Security Type: **WPA2 Enterprise**

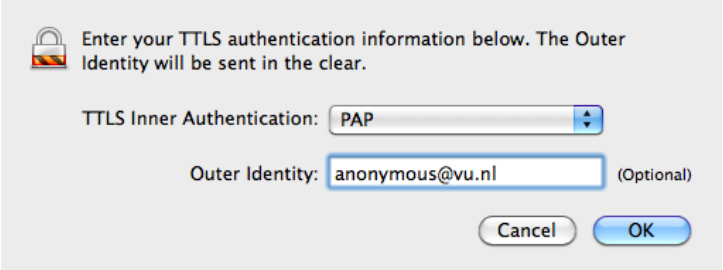
Do not enter *@student.vu.nl* behind your VU-net-id but use **@vu.nl**.
Your VU-net-id consists of 3 letters and 3 numbers.

- Under Authentication: unmark all checkboxes except **TTLS**.
- Select **TTLS** from the list and click on **Configure**...

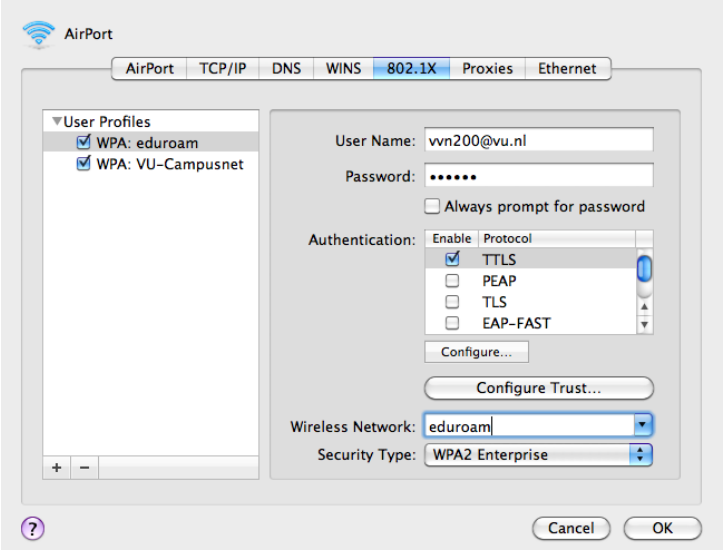
If no pop-up shows up after clicking on Configure... try clicking on **Configure Trust**... first, followed by clicking **OK**.



- Select **PAP** in the dropdown menu behind *TTLS Inner Authentication*.
- Enter for *Outer Identity:* **anonymous@vu.nl**.
- Click on **OK**.

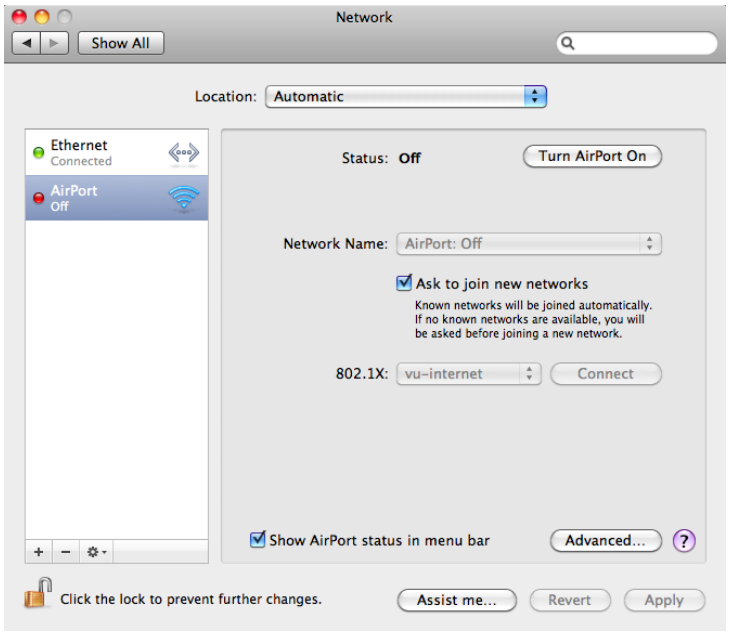


- Do the same for the user profile called *WPA: eduroam*
  - Username: **<VU- net- id>@vu.nl**
    Password: **<VU- net- id Password>**
    Wireless Network: **eduroam**
    Security Type: **WPA2 Enterprise**
  - Enable and select only **TTLS** authentication. Click on C**onfigure**..., select **PAP** and use **anonymous@vu.nl** as *Outer Identity* and click **OK**.

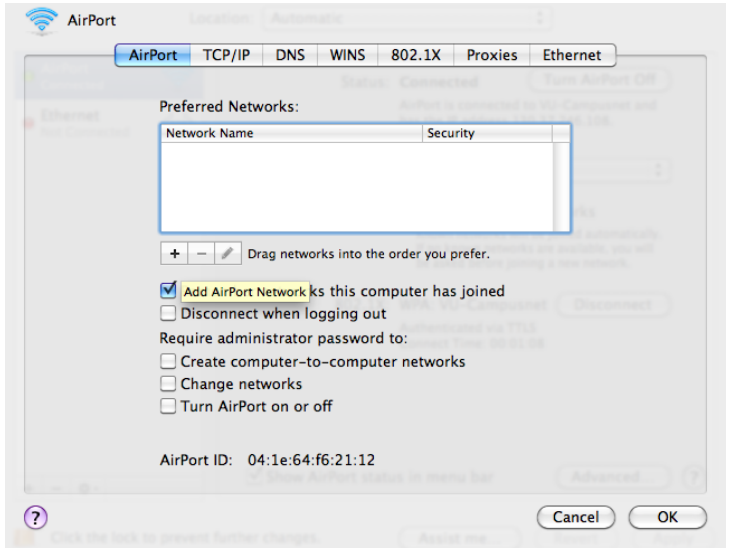


- Click on **OK** to leave the advanced settings.
- Click on **Apply t**o apply your changes.
- Click on **Advanced**… to open the advanced settings window again.

  *Don't forget to click on **Apply** first*



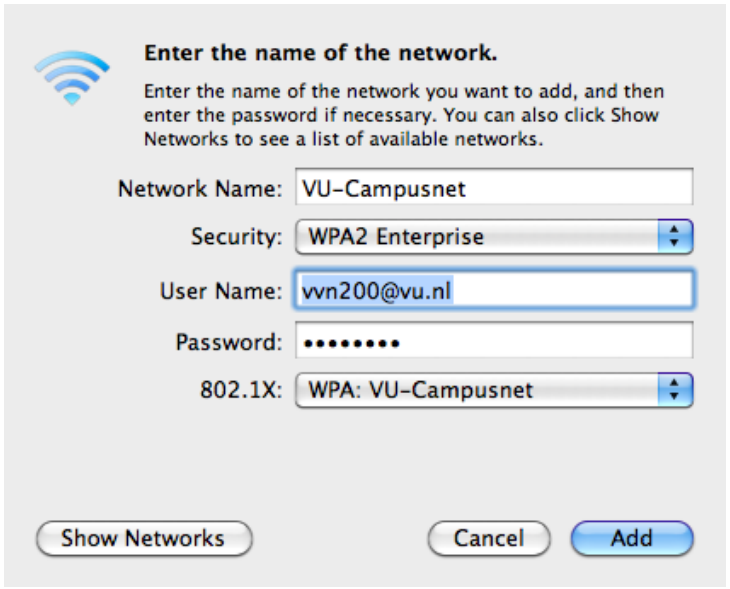
- In the *AirPort* tab, add a new Preferred Network by clicking the + button.



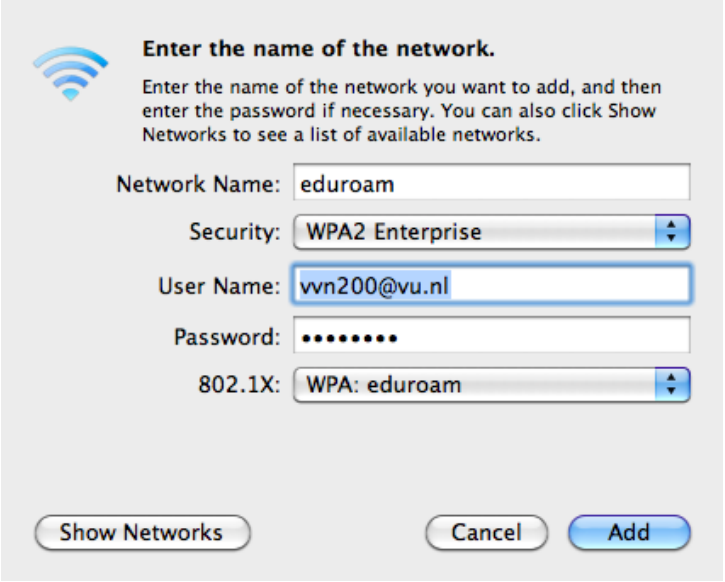
- Enter the following information:
  Network Name: **VU- Campusnet**
  Security: **WPA2 Enterprise**
  802.1X: **WPA: VU- Campusnet**

Your VU-net-id should be entered automatically in the **User Name** and **Password** fields after you select the VU-Wireless profile.
Be sure to type **VU- Campusnet** and not *vu-campusnet* or *VU-campusnet* or *vU-CamPusNet*

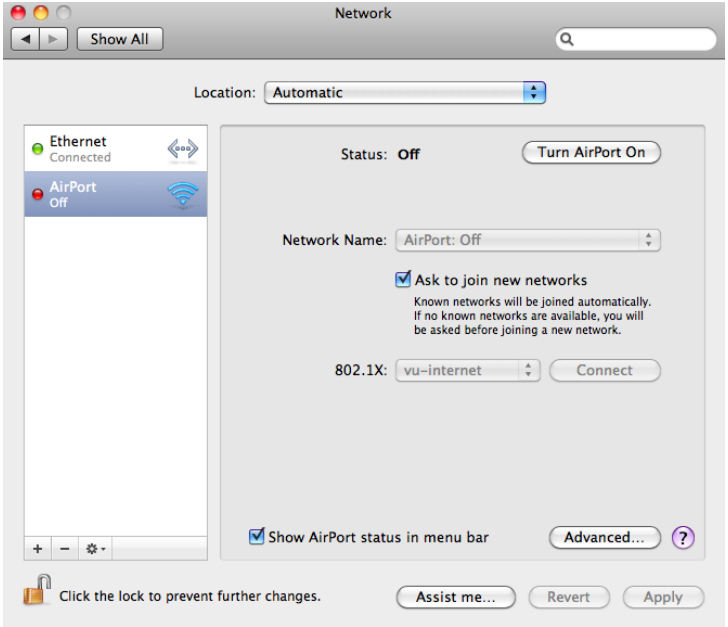
- Click on **Add**


Enter the name of the network.
Enter the name of the network you want to add, and then enter the password if necessary. You can also click Show Networks to see a list of available networks.
Network Name: VU-Campusnet
Security: WPA2 Enterprise
User Name: vvn200@vu.nl
Password: ••••••••
802.1X: WPA: VU-Campusnet
Show Networks
Cancel
Add

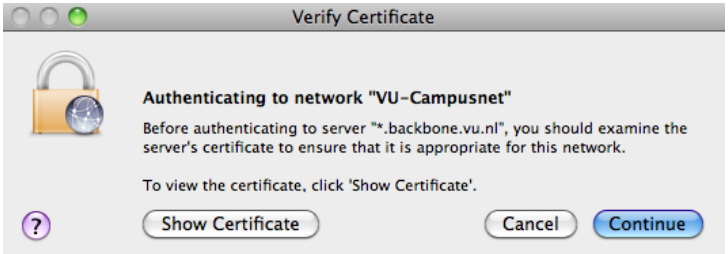
- Add another Preferred network for *edurom* by clicking on + again and then inserting the following infromation
  Network Name: **eduroam**
  Security: **WPA2 Enterprise**
  802.1X: **WPA: eduroam**
- Click **Add**
- Click on **OK** to leave the Advanced settings window


Enter the name of the network.
Enter the name of the network you want to add, and then enter the password if necessary. You can also click Show Networks to see a list of available networks.
Network Name: eduroam
Security: WPA2 Enterprise
User Name: vvn200@vu.nl
Password: ••••••••
802.1X: WPA: eduroam
Show Networks
Cancel
Add

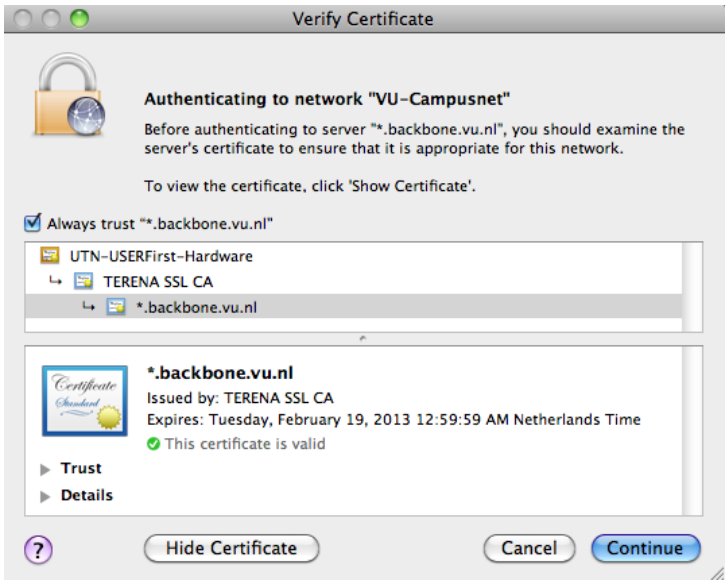
- Click on **Apply.**
- Click on **Turn Airport On**



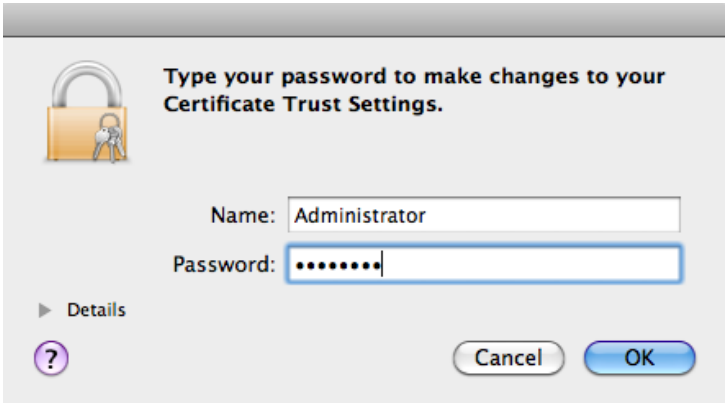
- The computer will try to connect to VU-Campusnet or eduroam. It may ask you to accept a Certificate.
- Click on **Show Certificate**.


Verify Certificate
Authenticating to network "VU-Campusnet"
Before authenticating to server "*.backbone.vu.nl", you should examine the server's certificate to ensure that it is appropriate for this network.
To view the certificate, click 'Show Certificate'.
Show Certificate
Cancel
Continue

- Make sure the box *Always trust "*.backbone.vu.nl"* is marked.
- Click on **Continue**.



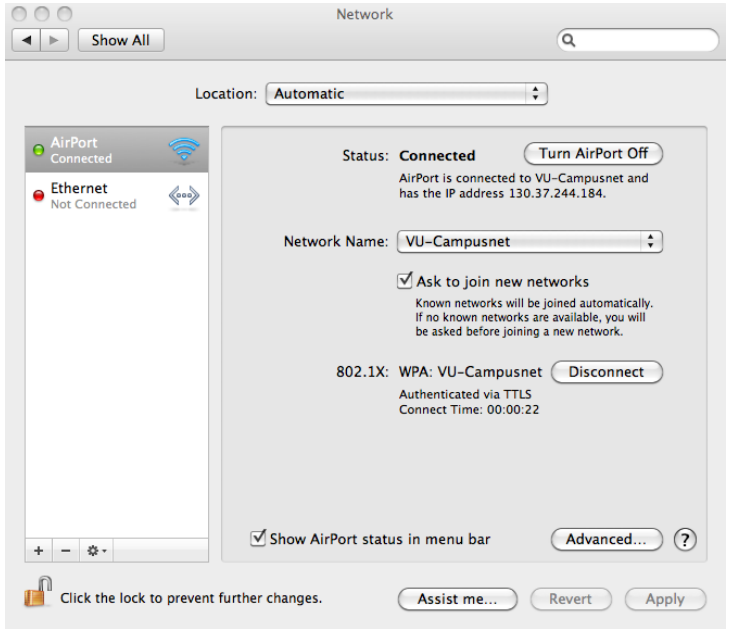
- Enter the username and password of an account with administrator rights on your computer.
- Click on **OK**.



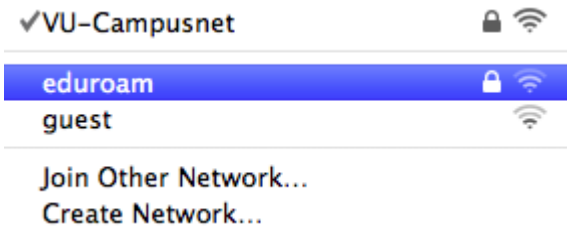
After a while, you should be connected to the VU-Campusnet or eduroam network and get an IP address in the 130.37.*.* range.

This normally takes about 10 seconds to complete. On some machines, it can take longer though, maybe even up to minutes.

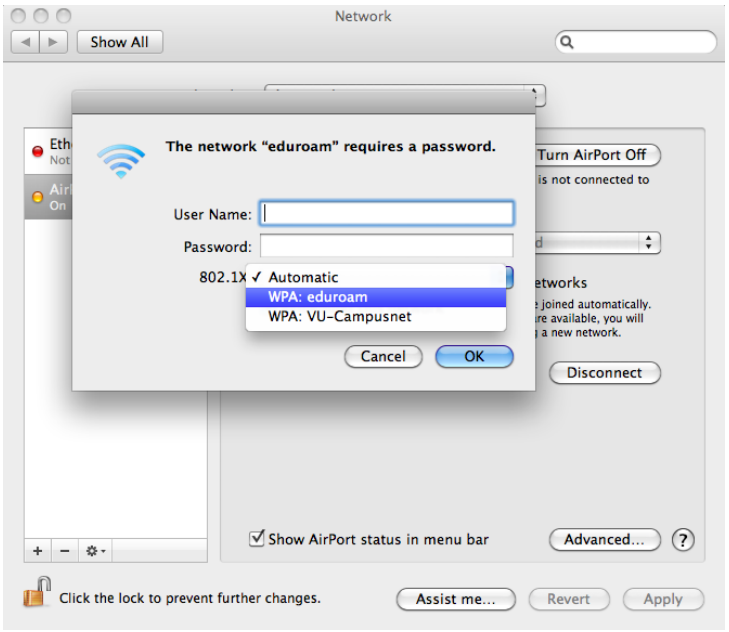
- To be sure that you can connect to both networks, try to switch to the other one by clicking on the *arrow* behind *Network Name*


Network
Show All
Location: Automatic
AirPort Connected
Ethernet Not Connected
Status: Connected
Turn AirPort Off
AirPort is connected to VU-Campusnet and has the IP address 130.37.244.184.
Network Name: VU-Campusnet
Ask to join new networks
Known networks will be joined automatically. If no known networks are available, you will be asked before joining a new network.
802.1X: WPA: VU-Campusnet
Disconnect
Authenticated via TTLS
Connect Time: 00:00:22
Show AirPort status in menu bar
Advanced...
Click the lock to prevent further changes.
Assist me...
Revert
Apply

- If you're connected to *VU-Campusnet*, click on **eduroam**. If you're connected to *eduroam*, click on **VU- Campusnet**.



- A popup may occur, asking for your password. Here, select the profile that you have created for the network that you're trying to log on to and press **OK**.
- If a timeout occurs, simply press **OK** again.



5. Assistance Servicedesk Wireless Network

If you did not manage to get the wireless working then please contact the UC-IT Service desk.
Located at the central service desk in the **main building 0A.11**
Hours of operation: Monday to Friday: **9:00** am - **5:00** pm
E-mail: **ucit-servicedesk@vu.nl**
Phone**: 020 59 80000**